

Patent and Trademark Office

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| Washington, D.C. 20231 | |

ATTORNEY DOCKET NO. FILING DATE FIRST NAMED INVENTOR APPLICATION NO.

09/013.819

01/27/98

OUDERKIRK

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MMC1/0828

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EXAMINER

SHAFER, R

ART UNIT

PAPER NUMBER

2872

DATE MAILED:

08/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks



Office Action Summary

| Application No. | Applicant(s) |
|-----------------|-----------------|
| 09/013,819 | OUDERKIRK ET AL |
| Examiner | Group Art Unit |
| ROSHAY | ER 2872 |

-The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address-

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 300TH MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133)

| □ Notice of Draftsperson's Patent Drawing Review, PTO-948 | ☐ Other |
|---|---|
| □ Notice of Reference(s) Cited, PTO-892 | ☐ Notice of Informal Patent Application, PTO-15 |
| ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) | ☐ Interview Summary, PTO-413 |
| Attachment(s) | |
| *Certified copies not received: | • |
| in this national stage application from the International Bureau (PC | · " |
| ☐ Copies of the certified copies of the priority documents have been | |
| ☐ Certified copies of the priority documents have been received in Ap | plication No. |
| ☐ Certified copies of the priority documents have been received. | |
| ☐ All ☐ Some* ☐ None of the: | |
| ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S. | C. § 119 (a)–(d). |
| Priority under 35 U.S.C. § 119 (a)-(d) | |
| ☐ The oath or declaration is objected to by the Examiner. | |
| ☐ The specification is objected to by the Examiner. | |
| ☐ The drawing(s) filed on is/are objected to by the | Examiner |
| ☐ The proposed drawing correction, filed on is ☐ | |
| Application Papers | requirement |
| □ Claim(s) | • |
| □ Claim(s) | |
| DxClaim(s) 1-9, 13, 14 Avo 48 | is/are rejected |
| □ Claim(s) | |
| Of the above claim(s) | |
| Disposition of Claims X Claim(s) | is/are pending in the application |
| Since this application is in condition for allowance except for formal maccordance with the practice under Ex parte Quayle, 1935 C.D. 1 1; 45 | atters, prosecution as to the merits is closed in 3 O.G. 213. |
| This action is FINAL. | |
| Responsive to communication(s) filed on $\frac{6/7/01}{}$ | |
| 7 1 - 1 1/1 1 | |

U.S. Patent and Trademark Office PTO-326 (Rev. 11/00) Part of Paper No. 25

Application/Control Number: 09/013,819

Art Unit: 2872

1. Applicant's arguments filed 6/07/01 have been fully considered but they are not persuasive.

Applicant argues that the Kondo et al reference does not teach a reflective polarizer and refers the examiner to the embodiment depicted by Fig. 4. However, the examiner is relying on the embodiment depicted by Fig. 7 which clearly illustrates a polarizer (7) which reflects light of one polarization state while transmitting light of a second polarization. Thus, the polarizer (7) of Kondo et al is a reflective polarizer.

Applicant argues that Matsumoto in view of Schrenk et al does not teach an absorbing polarizer in close proximity to the reflective polarizer to directly receive light not reflected by the reflective polarizer. The examiner disagrees and is of the opinion that polarizer (9) of Matsumoto is in close proximity to the modified reflective polarizer to directly receive light not reflected by the reflective polarizer.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 8, 9, 14 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Kondo et al ('526).

Kondo et al discloses an optical polarizer comprising a reflective polarizer (7) including first and second materials (I, II), at least one of the first and second materials being birefringent such that a refractive index difference between the first and second materials substantially reflects

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light having the first polarization and transmits light having the second polarization and an absorbing polarizer (13) laminated to the reflective polarizer, note by example only Fig. 7, wherein said first and second materials of said reflective polarizer can be polymeric. See column 4, lines 16-50.

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 5, 7 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto ('626) in view of Schrenk et al ('949).

Matsumoto discloses a reflective polarizer (2) which transmits light having a first polarization orientation and reflects light having a second polarization orientation and absorbing polarizer (9) positioned in an optical path of said reflective polarizer, note figures 1 and 2, except for explicitly stating that the reflective polarizer includes first and second polymeric materials wherein at least one of the first and second materials is birefringent.

Schrenk et al teaches it is known to use a reflective polarizer having first and second polymeric materials, wherein at least one of the first and second materials is birefringent such that the two materials exhibit a refractive index difference in the same field of endeavor for the purpose of linearly polarizing a large portion of incident light with little light absorption.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the reflective polarizer of Matsumoto to include the reflective polarizer of Schrenk et al in order to linearly polarize a large portion of incident light with little light being absorbed or alternating modify the reflective polarizer of Schrenk et al to include a absorbing polarizer as taught by Matsumoto in order to selectively select a particular polarization component of interest, based on the particular end use.

As to the limitations 5 and 7, it well known to manufacture polarizers comprising a polymeric material mixed with a Dichroic dye in the same field of endeavor for the purpose of obtaining an absorbing polarizer.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the absorbing polarizer of Matsumoto to include a typical polymeric layer of material mixed with a dichroic dye as is commonly used and employed in the polarizing art in order to transmit light having a first polarization orientation while absorbing light having the second polarization orientation.

4. Claims 3-7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al ('526).

Kondo et al discloses all of the subject matter claimed, note the above explanation, except for explicitly stating that the absorbing polarizer includes a polymeric material mixed with a dichroic dye.

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It is well known to manufacture polarizers comprising a polymeric material mixed with a dichroic dye in the same field of endeavor for the purpose of obtaining an absorbing polarizer.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the absorbing polarizer of Kondo et al to include a typical polymeric layer of material mixed with a dichroic dye as is commonly used and employed in the polarizing art in order to transmit light having a first polarization orientation while absorbing light having the second polarization orientation.

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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6. Any inquiry concerning this communication should be directed to R. D. Shafer at telephone number (703) 308-4813.

Shafer/RDS

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